



Chesterfield County, Virginia

Memorandum

DATE: AUGUST 4, 2006
TO: CHESTERFIELD COUNTY PLANNING COMMISSION MEMBERS
FROM: KIRKLAND A. TURNER, DIRECTOR/PLANNING KAT
SUBJECT: SECURITY FOR HIGH DENSITY RESIDENTIAL PROJECTS

In preparation for your work session on security for high density residential projects staff has prepared the attached guidance for the need, content and preparation of security plans. Staff has also prepared the following language that a zoning applicant may proffer to address security concerns in higher density residential projects:

Proposed Proffer For Any Project Which Includes Residential Uses at a Density in Excess of Four Units Per Acre

Prior to any site plan or subdivision approval, the owner or its successor shall submit a security plan to the Chesterfield County Police Department for review and approval. The police department shall review the security plan on an annual basis during which it may consider the type, frequency and severity of crime at the property to determine if the plan requirements should be modified up to and including the owner or its successor entering into a contract with the county or other approved entity for providing on-site security personnel. The owner or its successor agrees to implement the security plan as approved and thereafter modified.

Please call me at 748-1049 or Jim Eicher with the Police Department at 674-7006 ext. 111 if you have any questions.

Chesterfield County Security Plan Proffer

In an effort to keep Chesterfield County a *First Choice* Community that supports vitality, opportunity and safety for its residents, high density rezoning applicants are asked to actively contribute to the safety of their projects and the community with a new proffer proposing a security plan.

Chesterfield County's Planning and Police Departments endorse Crime Prevention Through Environmental Design (CPTED) as a proactive crime prevention tool to be used in the development review process. CPTED is based upon the belief that the proper design and effective use of the built environment can lead to a reduction in the fear and incidence of crime and an improvement in the quality of life. CPTED takes crime prevention one step further by involving other design professionals (planners, architects, landscape planners, engineers) in the crime prevention planning process. This partnership makes safety a by-product of good design.

CPTED encompasses several interrelated strategies (access control, surveillance, territoriality and maintenance), but for purposes of the initial security plan, standards for only access control and surveillance are applicable.

Access control is the physical guidance of people coming and going from a space by the judicious placement of entrances, exits, fencing, landscaping and lighting. This design concept is directed primarily at decreasing the opportunity for criminal activity by denying access to crime targets and creating the perception of risk in offenders.

Required access controls could include, but are not limited to:

- Post 'No Soliciting / No Trespassing' signs at pedestrian and vehicular entrances to the site.
- Deadbolt locks on solid core exterior doors and on solid core doors separating garages from the interior of the dwelling.
- Three inch long screws in door strike plates.
- Wide angle peepholes in solid core doors.
- Secondary locking mechanisms for sliding and double swing doors as approved by the Police Department.
- Fencing portions of a property's perimeter to control pedestrian movement into and out of the development.
- Dusk to dawn site lighting that meets the Illuminating Engineering Society of North America's (IESNA) minimum standards for multi-family development.
- A building alarm for the clubhouse / management office.

Surveillance is the placement of physical features, activities and people in a way that maximizes visibility. This design concept is aimed at keeping intruders under observation, and therefore less likely to commit criminal acts. Maximizing observation makes residents and visitors feel safer.

Required surveillance measures could include, but are not limited to:

- Design buildings so all exterior doors are visible to the street and/or neighboring residences.
- Install windows on all sides of the buildings to maximize visibility.
- Use open railings in stairwells and on patios/balconies to facilitate greater visibility.
- Use open riser stairs to maximize visibility (where permitted by building code).
- Locate plant species with low growth habits (less than 2') within a twelve (12) foot radius of building entrances.

- Verification via lighting and landscaping plan comparison that mature landscaping (i.e. trees) will not compromise the site lighting because of improper location.
- Dusk to dawn lighting of the building entrances and (exterior) hallways, the pedestrian pathways and parking areas to the Illuminating Engineering Society of North America's (IESNA) minimum standards for multi-family development.

Many of the security plan recommendations will vary based on site and surrounding conditions for each project. The composition and layout of the project itself will dictate different safety needs as well. Security measures should be aimed at controlling access, maximizing day and nighttime visibility and creating a unique sense of 'place' for each project. At a minimum, specific measures should be in place to enhance the security for project residents.

Additional security measures – If annual review of crime patterns and statistics associated with the project indicate that these strategies are not sufficient to mitigate criminal activity, additional security measures, as deemed appropriate by the Police Department, will be required. The Police Department will base additional security measures on the type, frequency and severity of crimes occurring at the site. Additional required security measures could include, but are not limited to:

- Issuing parking decals for residents
- Providing on-site management staff
- Hiring a private security force for an established number of hours per week
- Hiring off-duty police officers
- Installation and monitoring of closed circuit television (CCTV)

Security strategies and requirements will be reviewed on an annual basis to determine if extra preventive measures are still necessary. Crime types, patterns and statistics associated with the project will drive the need, or lack thereof, for security measures over and above those provided at the development review stage of the approval process.

Logistics of a Security Plan

The Police Department's CPTED Planner will attend pre-application meetings to inform rezoning applicants about CPTED principles and strategies. The CPTED Planner will assist the applicant with crime prevention measures that may be required at the time of site plan review. The more site layout and construction details that can be provided at time of rezoning pre-application meeting, the more specific the preliminary CPTED recommendations that can be provided will be.

The security plan shall be submitted at time of site plan application. The Police Department will review the document and render a decision on approval or denial by the time of site plan staff / developer meeting.

Elements of a Security Plan

- Owner/Developer's agreement to use certain CPTED strategies in the design of the Project.
- Owner/ Developer's agreement to install and maintain certain security measures (see proposed list of access control/surveillance measures for examples).
- Police Department will conduct an annual review of crime patterns and statistics for the Property to determine if the measures required by the initial Plan are sufficient. The Police Department

can require revisions to the Plan which may include additional security measures (such as those listed above).

- Owner/Developer's agreement to comply with all requirements of the Plan as initially approved and later modified.
- Acknowledgement by Owners/Developer that compliance with the Plan is a zoning condition which runs with the land and is required by all successors or assigns.
- Acknowledgement by Owners/Developer that any homeowner's association formed for all of a portion of the Property will be notified of the Plan and will be required to comply with the Plan.
- Upon approval of the initial Plan, compliance with its requirements before the issuance of a Certificate of Occupancy. Compliance with the requirements of any revisions to the Plan within sixty (60) days of written notice from the Police Department.

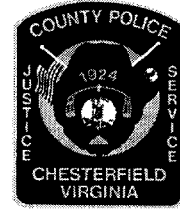


Chesterfield County Police

CPTED Security Plan

for

Anywhere Chesterfield Apartments



Project ID: 07PR0999

Date: August 15, 2006

GPIN: 112-358-1322

Planner: Jane Jacobs

Reviewer: Jim Eicher, CPTED Planner

In making public and private buildings safer and more secure, architecture is one of the least used pieces of the security puzzle. Treating security as an afterthought increases the cost and obtrusiveness of security features. Crime Prevention Through Environmental Design (CPTED) creates a more secure environment through the use of natural crime prevention strategies, complemented with appropriate target hardening measures. Environmental design cannot eliminate crime completely because it does not attack root causes. However, CPTED can increase safety as well as the perception of safety (in legitimate users and offenders) and create a self-policing environment.

While the Police Department's recommendations do not guarantee a crime-free environment, it is our experience that the application of CPTED concepts---natural surveillance, natural access control, territorial reinforcement and maintenance---will reduce the opportunity for crime and will enhance the quality of life. Should you have questions, please contact Jim Eicher, CPTED Planner, at 674-7006 x111.

Narrative

The proposed development will be located at the back of a larger office development where surveillance will be limited. The location does not allow cut through vehicular traffic, and any unknown vehicles will stand out more readily for this reason. While the site has one vehicular entrance, there are many potential pedestrian escape routes for offenders. Offenders can easily flee to an adjoining residential neighborhood or into more remote areas of the office development. With respect to the building, there are no windows on the southern wall which compromises visibility by creating a virtual blind spot. Because visibility is compromised, controlling access to and from the parking area should be a priority.

Based on the information provided at this time, the Police Department recommends implementation of the following design and security measures to reduce the opportunities for criminal activity:

Surveillance

Surveillance strategies are aimed at keeping intruders under observation and undesirable behavior under control. Through the judicious placement of physical features, landscaping, buildings, parking and people, create an environment where abnormal activities can be deterred through observation and detected through ample visibility.

Recommendations:

- Install windows on all four sides of buildings to maximize passive surveillance of events occurring at the property.
- Design buildings so exterior doors are visible to the street and / or neighbors.
- Install 180 degree peepholes in residence doors to promote visibility and safety
- Clubhouse windows and glass doors should be free of tinting in order to maximize visibility.

- Use open balustrades and open risers in stairwells to increase visibility.
- Locate elevators and stairwells in higher activity areas that will receive ample visibility. Foster open visibility through open construction techniques and the use of glass.
- Ensure that landscape plantings do not encumber sightlines and create concealment areas around the property, but especially around building entrances. As a rule of thumb, keep shrubs below two feet in height and tree canopies higher than six feet to facilitate visibility. Always use species with a *natural* growth habit that supports crime prevention efforts.
- Trees adjacent to buildings, walkways and parking areas should have a tree-form and non-pyramidal shape growth habit in order to eliminate concealment and enhance visibility.
- Per the Illuminating Engineer Society of North America's (IESNA) security lighting standards for multi-family residences, illuminate the parking areas with a minimum maintained lighting level of 3.0 foot candles. Lights should activate via automatic photocell sensor between dusk and dawn. Metal halide lights are recommended for their clarity and accurate color rendition. All lights must be shielded to prevent glare and meet Planning Department requirements.
- Illuminate building and residence entrances / exits from dusk to dawn with photocell-activated lights to make detection of overnight activities easier.
- Verify that landscape placement does not, and will not when mature, conflict with or reduce the efficacy of the site lighting.
- Position recreation areas (clubhouse/office, pools, playgrounds, tennis courts) to be visible from as many units as possible. Usually this involves centrally locating the office and amenities.
- Place bicycle racks in high visibility locations.

Access Control

Access control intends to deny access to crime targets and create a perception of risk and detection in offenders. Use physical features such as entrance placement, fencing, landscaping and lighting to provide spatial definition and guide individuals to approved locations via approved routes.

Recommendations:

- To clearly demarcate the transition from public to semi-public space, define the property lines and site entrances with landscaping, ground covers and/or decorative metal fences.
- Post clear and ample signs to direct visitors to the office and remove excuses for cruising in the project.
- Use walkways and landscaping to guide visitors to approved entries and away from private areas.
- Architecturally enhance building entrances to guide visitors to approved entry points.
- Post alarm decals on exterior clubhouse and maintenance building doors to help dissuade illegal entry.
- Where apartments feed off a central corridor, limit access into the corridor to one point. Corridor should remain well-lit, even during daytime hours.
- To help deny entry, minimize or eliminate openings (windows, doors, vents) in recessed areas, below grade areas or in areas that receive limited natural surveillance.
- Enclose areas beneath stairs to eliminate concealment areas where offenders might hide. If the design allows, use open riser stairs to accomplish the same purpose.
- Clubhouse, laundry and office doors should utilize auto-closing / latching door hardware to control entry.
- Secure overhead / roll-up doors on both sides of the door to help deny entry.
- Locate trees so that they cannot be climbed to access any building's roof. Remember to consider the tree's mature size, not the planted size.
- To reduce occupant vulnerability, do not equip common restroom doors with locks that will allow the doors to be locked from the inside.
- Remove, relocate or redesign any items that provide access to the building's roof. Examples include dumpster enclosures and fences adjacent to buildings, gas pipes going to a building's roof, HVAC equipment, and architectural façade treatments.

- Criminals are lazy. Keep site free of unsecured items (ladders, pallets, blocks, bricks, chairs, etc.) that offenders can use to access the roof or break into the building.
- Secure all landscape border materials to prevent their use as tools to break into the building.
- Benches, tables, trash cans, bicycle racks, sculptures/art and other site elements should be anchored to prevent removal.

Territorial Reinforcement

Territoriality attempts to turn an area over to legitimate users so that they will be more likely to adopt ownership over that defined place. Use natural (walkway locations, building orientation, landscape placement) and physical (signage, fencing, lighting) features that help foster ownership and extend a sphere of influence from the interior of the building to the perimeter of the property.

Recommendations:

- Create a distinction between public, semi-public and private space through the use of surface treatments, landscaping, decorative metal fences, signage and lighting.
- Post 'No Trespassing' / 'No Loitering' / 'No Soliciting' signs at pedestrian and vehicular site entrances to clearly define prohibited activities.
- Post signs on site amenities and facilities to indicate that they are for 'Resident Use Only'.
- Where feasible, locate individually locking mailboxes next to the corresponding dwelling units.
- Create a unique façade or architectural treatment to make the project stand out as a unique place rather than just more boxes-on-a-lot.
- To facilitate response by emergency personnel and make the site easier to navigate for visitors, clearly identify all buildings and residential units with minimum three (3) inch tall, well-lit numbers / letters.
- Discourage loitering by non-residents and enforce occupancy / lease provisions.
- Encourage residents and staff to report unusual or suspicious activities and persons as well as broken or unlocked door and window hardware.

Maintenance

Property maintenance is instrumental in creating a sense of place and demonstrating that management will defend a property against criminal activities. Adopt policies and procedures that support the function of the site. Effective policies keep properties clean, well-lighted and maintained, thereby expressing greater proprietorship.

Recommendations:

- Establish a maintenance program for cleaning light enclosures (to ensure full illumination), repairing/replacing broken or burned out lights, and maintaining trees and shrubs adjacent to light fixtures.
- Keep all landscaping pruned back from windows, doors, walkways and fences.
- Keep site free of trash and debris to demonstrate concern for the site, and by extension, the events occurring there.
- Use durable, vandal-resistant materials and fixtures wherever possible.
- Enforce rules regarding inappropriate outdoor storage and junk vehicles.

Hardware

While 'natural' CPTED strategies are preferred, there is a place for purely mechanical crime prevention. Hardware recommendations compliment natural strategies and create a layered approach to security.

Recommendations:

- Remove door hardware from the outside of (non-entry) doors to deny access and direct people to approved entry points.

- Use non-removable hinge pins or piano hinges on exterior doors to prevent illegal entry.
- Install deadbolt locks on residence, clubhouse and non-emergency egress doors. The deadbolt lock should be a separate locking device from the doorknob locking system and the throw bolt should be at least one (1) inch long.
- Place latch guards or astragals on solid panel office / clubhouse doors to resist illegal building entry via prying.
- Install four screw security strike plates to make door penetration more difficult. Doorframe strike plate screws should be at least three inches in length and should be anchored into three inches of solid framing (wall studs).
- Cover glass doors and windows within 40" of door locking mechanisms with a security film to prevent penetration. A 6 - 8 mil thick film is suggested. Resources include: www.llumar.com and www.vista-films.com. See web sites for a local installer.
- Install a building alarm to monitor the office / clubhouse. Use a reputable local company that is Department of Criminal Justice Services (DCJS) certified for installation. Post alarm decals on all exterior doors to discourage break-ins.
- If installing closed circuit television (CCTV), use a digital system for image quality, storage and recording capabilities and ease of maintenance. Cameras should operate under day and nighttime conditions.

SAMPLE